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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/922,107	08/02/2001	Ali Haeri	SS-709-07	8679

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EXAMINER

ARTHUR JEANGLAUDE, GERTRUDE

ART UNIT PAPER NUMBER

2144

DATE MAILED: 11/18/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 09/922,107	<b>Applicant(s)</b> HAERI ET AL.	
	<b>Examiner</b> Gertrude Arthur-Jeanglaude	<b>Art Unit</b> 2144	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 02 August 2001.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-16 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 02 August 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>80201</u> . | 6) <input type="checkbox"/> Other: _____  |

**DETAILED ACTION**

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tanabe et al. (U.S. Patent No. 5,333,131) in view of Chiang (U.S. 20020103895).

As to claim 1, Tanabe et al. disclose a method for fetching bandwidth control information about a datapacket in a network that is associated with a port number carried within such datapacket, the method comprising the steps of: parsing a port number from an information header in a datapacket; (See col. 6, lines 54-68; col. 7, lines 53-58); it further discloses searching for a matching port number in a port group table (26a, 26b) as shown in Figs. 4-5 that associates port groups, port numbers (See col. 7, lines 1-20). Tanabe et al. fail to specifically disclose service-level application policies; and pointing to a particular service-level application policy if a match occurs in the step of searching. In an analogous art, Chiang teaches a network manager wherein it discloses network statistics wherein the statistics enforce service-level agreement policies on individual connection sessions by limiting the maximum data throughput for each connection (See paragraph 0015). Therefore it is considered that the a service level application policy is pointed if a match (connection) occurs. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the

system of Tanabe et al. with that of Chiang by having a particular service level application policy if a match occurs in the step of searching in order to collect and analyze real-time information regarding user bandwidth demands in a network environment.

As to claim 2, Tanabe et al. disclose all but fails to specifically disclose the step of: using the particular service-level application policy to control a communication bandwidth afforded to a communication throughput of the datapacket. In an analogous art, Chiang teaches a network manager wherein it discloses network statistics wherein the statistics enforce service-level agreement policies on individual connection sessions by limiting the maximum data throughput for each connection (See paragraph 0015). Therefore it is considered that the a service level application policy is pointed if a match (connection) occurs. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the system of Tanabe et al. with that of Chiang by using the particular service level application policy to control a communication bandwidth afforded to a communication throughput of the datapacket in order to collect and analyze real-time information regarding user bandwidth demands in a network environment.

As to claim 3, Tanabe et al. disclose the preliminary step of: listing a plurality of applications with standard port numbers as individual group entries in the port group table that are to be afforded communication bandwidth control(See col. 10, lines 5-20); but fails to specifically disclose associating a plurality of service-level application policies with corresponding ones of the plurality of applications. In an analogous art,

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Chiang teaches a network manager wherein it discloses network statistics wherein the statistics enforce service-level agreement policies on individual connection sessions by limiting the maximum data throughput for each connection (See paragraph 0015).

Therefore it is considered that the a service level application policy is pointed if a match (connection) occurs. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the system of Tanabe et al. with that of Chiang by associating a plurality of service level application policies with corresponding ones of the plurality of applications in order to collect and analyze real-time information regarding user bandwidth demands in a network environment.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 4-16 are rejected under 35 U.S.C. 102(e) as being anticipated by Chiang et al. (U.S. Publication No. 2002/0103895 A1).

As to claim 4, Chiang discloses a network, comprising: a local group of network workstations and clients with a set of corresponding local port numbers, and that

periodically access a wide area network (WAN) (see abstract); at least one type of application program for executing packet exchanges that involve any of the local group (See paragraph 0036); a class-based queue (CBQ) traffic shaper (110) (see paragraph 0035) disposed between the local group and the WAN, and providing for a variety of access bandwidths; a IP-address/port-number classifier (IP- address/port-number classifier) disposed within the CBQ traffic shaper(See paragraph 0035, 0038, 0040), and providing for an identification of which application program transmitted or received a particular packet at any of the local group (See paragraph 0043; and an automatic bandwidth manager (ABM) (See paragraph 0040) disposed within the CBQ traffic shaper, and providing for a controlled delivery rate of each said particular packet that is dependent on the application-program type determined by the IP-address/port-number classifier; wherein, bandwidth control information about a datapacket in the network is associated with a source or destination port number of such datapacket, and a processor provides for parsing a port number from an information header in a datapacket, and standard port numbers are gathered into groups that are used to point to individual service-level agreement (SLA) policies (See paragraph 0069).

As to claim 5, Chiang discloses the CBQ traffic shaper is configured such that a user SLA policy is attached to each and every group (See paragraph 0069).

As to claims 6-7, Chiang discloses that the CBQ traffic shaper is configured so any SLA policy conflicts between local port number transfers are resolved with a lower-speed one of the conflicting policies taking precedence and the CBQ traffic shaper dynamically attaches SLA policies and readjusts the CBQ traffic shaper to allow an on-

demand type of delivery (See paragraph 0039, 0063, 0067, 0069-0071).

As to claim 8, Chiang et al. discloses the IP-address/port-number classifier monitors a particular port number and port for information that indicates that a particular application program is beginning a session; the IP-address/port-number classifier uses the information to gather additional port number and port information that can be used to identify subsequent packet exchanges that belong to the particular application program; and the ABM is provided with the information and the additional port number and port information for a class-base queue that favors packets from the particular application program with increased access bandwidth (See paragraph 0063- 0065).

As to claim 9, Chiang discloses a computer network method, comprising the steps of: dividing a plurality of datapackets (1302, 1304 ) into classes that include at least one class for packets exchanged over a computer network by a particular application program; identifying which class each particular one of plurality of packets belongs to on the computer network (See paragraph 0064); controlling a delivery rate of an identified particular one of plurality of datapackets according to its classification (See paragraph 0065); parsing a port number from an information header in a datapacket; searching for a matching port number in a port group table that associates port groups, port numbers, and service-level application policies; and pointing to a particular service-level application policy if a match occurs in the step of searching (See paragraph 0015).

As to claim 10, Chiang discloses the step of identifying includes using a IP-address/port-number classifier (IP-address/port-number classifier) to monitor a particular port number and port for information that indicates that a particular application

program is beginning a session, and the IP-address/port- number classifier uses the information to gather additional port number and port information that can be used to identify subsequent packet exchanges that belong to the particular application program; and the step of controlling includes using an automatic bandwidth manager (ABM) that is provided with the information and the additional port number and port information, and uses a class-base queue that favors packets from the particular application program with increased access bandwidth (See paragraph 0064, , 0065; Fig. 6 ; paragraph 0053).

As to claim 11, Chiang discloses the step of dividing comprises classifying ones of the plurality of datapackets according to an adjustable parameter (See paragraph 0064).

As to claim 12, Chiang discloses the step of dividing comprises classifying ones of the plurality of datapackets depending on a dynamic variable (see paragraph 0050).

As to claim 13, Chiang discloses the step of identifying includes monitoring exchanges between a network client and a network server to extract a port information that is used in a subsequent data exchange (see abstract); and the step of classifying is such that the classifying depends on the port information (See paragraph 0064-0065).

As to claim 14, Chiang discloses the step of controlling includes buffering ones of the plurality of datapackets (See paragraph 0064).

As to claim 15, Chiang discloses the step of controlling includes distributing ones



of the plurality of datapackets amongst corresponding plurality of class-based queues that are operated at rates that are dependent on the classes (See paragraph 0064-0065).

As to claim 16, Chiang discloses a computer network method, comprising the steps of: dividing a plurality of datapackets (1302, 1304) into classes that include at least one class for packets exchanged over a computer network by a particular application program (See Figs. 7A and 7B); identifying which class each particular one of plurality of packets belongs to on the computer network with a IP-address/port-number classifier (IP-address/port-number classifier) (See paragraph 0064) that monitors a particular port number and port for information that indicates that a particular application program is beginning a session, and the IP-address/port-number classifier uses the information to gather additional port number and port information that can be used to identify subsequent packet exchanges that belong to the particular application program; communicating any application-identifying information obtained in the step of identifying within a message to an automatic bandwidth manager (ABM) (See paragraph 0065); and controlling with the ABM a delivery rate of an identified particular one of plurality of datapackets according to its classification; wherein, bandwidth control information about a datapacket in the network is associated with a source or destination port number of such datapacket, and a processor provides for parsing a port number from an information header in a datapacket, and standard port numbers are gathered into groups that are used to point to individual service-level agreement (SLA) policies (see paragraph 0015, 0065, 0069).

***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Haeri et al. US Pub 20030031178

Aimoto US 6570876

Chapman et al. US Pub 2003/0103450

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gertrude Arthur-Jeanglaude whose telephone number is (571) 272-6954. The examiner can normally be reached on Monday-Friday from 8:30 a.m. to 6:00 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William Cuchlinski can be reached on (571) 272-3925. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

GAJ

*GAJ*  
November 10, 2004

*Gertrude A. Jeanglaude*  
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PRIMARY EXAMINER